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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.       | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------------|------------------|
| 09/746,362  | 12/22/2000  | David W. Green       | D5407-123<br>584-25557-US | 2196             |
| 44639   | 7590        | 07/09/2004           | EXAMINER<br>DAS, CHAMELI  |                  |
| CANTOR COLBURN LLP<br>55 GRIFFIN ROAD SOUTH<br>BLOOMFIELD, CT 06002 |             |                      | ART UNIT<br>2122          |                  |

DATE MAILED: 07/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 09/746,362             | GREEN ET AL         |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | CHAMELI C. DAS         | 2122                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 May 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1. This action in response to the amendment filed on 5/14/04.
2. Claims 1-9 have been amended.
3. Claim 10 has been canceled.
4. Claims 11-14 have been added.
5. Claims 1-9 and 11-14 have been rejected.
6. Claims 1, 3, 5, 8-9, 11-12, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helland et al (Helland), US 6,134,594 and further in view of Hardiman et al, (Hardiman), US 5,504,672.
7. Claims 2, 4, 6-7, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helland et al (Helland), US 6,134,594 and further in view of Hardiman et al, (Hardiman), US 5,504,672 and official notice.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 5, 8-9, 11-12, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helland et al (Helland), US 6,134,594 and further in view of Hardiman et al, (Hardiman), US 5,504,672.

***As per claim 1, Helland discloses:***

- at least one memory store operatively connected to the processing unit

(Helland, col 4 lines 62-67)

- extensible N-tier software resident in and executable within the at least one processing unit (Helland, abstract, col 4 lines 3-7, col 7 lines 5-10)
- inventory of software components resident in the memory store (abstract, col 5 lines 37-45)
- wherein a plurality of tiers are generated from the inventory of software components using the N-tier software (Helland, col 3, lines 1-5, col 7, lines 48-52, col 23, lines 5-8)
- each tier being associated with at least one other tier, and each tier comprising a plurality of software components and performing a predetermined function, (Helland, col 6, lines 40-67, col 7, lines 1-40, Figure 2)
- each software component comprising a software object (col 4, lines 25-35, col 7 lines 1-40)
- an input device... processing unit (col 5 lines 13-16)
- an output device ... processing unit (col 5 lines 13-16).

Helland discloses developing a software application by manipulating data (Helland, col 6, lines 22-30). Helland does not specifically disclose manipulating data associated with an asset. However, Hardiman discloses manipulating data associated with an asset (Hardiman, col 11, lines 61-61-67, col 12, lines 1-4). The modification would be obvious because one of the ordinary skill in the art would be motivated to implement a method for any industrial application.

*As per claim 3*, Helland discloses the output device ... combination thereof (Helland, col 5 lines 45-55, col 6 lines 40-52, col 7 lines 5-10).

*Regarding claim 5, Helland discloses:*

- selecting a first software component from an inventory of software components... set of asset (col 23 lines 5-10)
- selecting a second software component from outside the inventory ... to perform a second function (col 6, lines 45-68, col 9 lines 40-60, col 14 lines 38-45)
- defining the sequencing of the first and second software components in order to manipulate data associated with the selected set of assets ( col 14, lines 61-66, col 15, lines 1-20, col 8, lines 26-39, col 6, lines 20-35).

For the rest of the limitations see the rejection of claim 1 above.

*Regarding claim 8, Helland discloses:*

- creating one or more processing software components to process data ... predefined amount of data (Helland, col 9 lines 42-48, col 7 lines 26-29, col 9 lines 55 col 10 lines 1-12, col 17 lines 21-27).

*Regarding claim 9, Helland discloses:*

- software components are distributed... units (Helland, col 3 lines 61-66, col 4 lines 54-60).

*As per claim 11, Helland discloses:*

- a computer storage medium having a computer encoded ... manipulate data (col 5, lines 18-42).

For the rest of the limitations see the rejection of claims 1 and 5 above.

**As per claim 12**, set of assets comprises a set of physical assets (Hardiman, col 11 lines 61-67 and col 12 lines 1-4).

**As per claim 14**, Helland does not specifically disclose that the software is an asset of the petroleum company. However, Hardiman disclose that the software is an asset of the petroleum company (Hardiman, col 11 lines 61-67, col 12 lines 1-2). The modification would be obvious because one of the ordinary skill in the art would be motivated to implement a method for an industrial application.

9. Claims 2, 4, 6-7, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helland et al (Helland), US 6,134,594 and further in view of Hardiman et al, (Hardiman), US 5,504,672 and official notice.

**As per claim 2**, Helland does not disclose that the software comprises field components, well components and log components. Hardiman disclose to implement the software for petroleum industry. Hardiman does not specifically disclose field components, well components and log components. However, official notice is taken for field components, well components and log components for the oil field. The modification would be obvious because one of the ordinary skill in the art would be motivated to implement a method for petroleum industry efficiently.

**As per claim 4**, applications generated using the N-tier software (Helland, Abstract, col 6 lines 41-52, col 7 lines 5-10, col 20 lines 20-30), applications generated using the N-tier software in response to internal trigger, external trigger (col 6 lines 60-63, col 9 lines 20-37).

Helland discloses the additional software may be created (col 4 lines 40-47). Helland does not specifically disclose that the additional software may be created or modified by user input. However, the back ground section of Helland's disclosure shows the software may be created or modified by user input (col 2 lines 55-62).

The background section does not specifically disclose modified manually by the user. However, official notice is taken for modifying the method **manually** by the user. The modification would be obvious because one of the ordinary skill in the art would be motivated to implement a user friendly method.

Helland does not specifically disclose that software is generated **automatically**. However, official notice is taken for **automatically** generating the software. The modification would be obvious because one of the ordinary skill in the art would be motivated to provide as much automation as possible to reduce the work load on the developer and thus make the system easier to use.

**Regarding claim 6, Helland discloses:**

- selecting the software component from an inventory of software components  
(Helland, col 23 lines 5-10)



- associating one or more components (Helland, col 14 lines 60- col15 lines 1-45).

Helland does not specifically disclose that the selected software components represent predetermined number of components. However McDonald discloses that implementing a software object by selecting the component which represents the predetermined number of components (McDonald, abstract, col 30 lines 1-6, col 11 lines 51-60). Hardiman disclose that the software is an asset of the petroleum company (Hardiman, col 11 lines 61-67, col 12 lines 1-2). The modification would be obvious because one of the ordinary skill in the art would be motivated to implement a method for an industrial application.

Neither Helland nor Hardiman disclose that the software comprises field components, well components and log components. However, official notice is taken for field components, well components and log components for the oil field. The modification would be obvious because one of the ordinary skill in the art would be motivated to implement a method for petroleum industry efficiently.

**Regarding claim 7,** Helland discloses a change menu programmatically accessed (Helland, col 11 lines 27-32). Helland does not disclose change menu may be manually accessed. However, official notice is taken for modifying the method **manually** by the user. The modification would be obvious because one of the ordinary skill in the art would be motivated to implement a user friendly method.

**As per claim 13**, Helland does not disclose that the software comprises field components and well components. However, official notice is taken for field components and well components for the oil field. The modification would be obvious because one of the ordinary skill in the art would be motivated to implement a method for petroleum industry efficiently.

### **Conclusion**

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chameli Das whose telephone number is (703) 305-

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1339. The examiner can normally be reached on Monday through Friday from 7:00 A.M. to 3:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam can be reached on 703-305-4552. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 (official fax).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-9600.

*Chameli C. Das*  
**CHAMELI C. DAS**  
**PRIMARY EXAMINER**

*6/23/09*